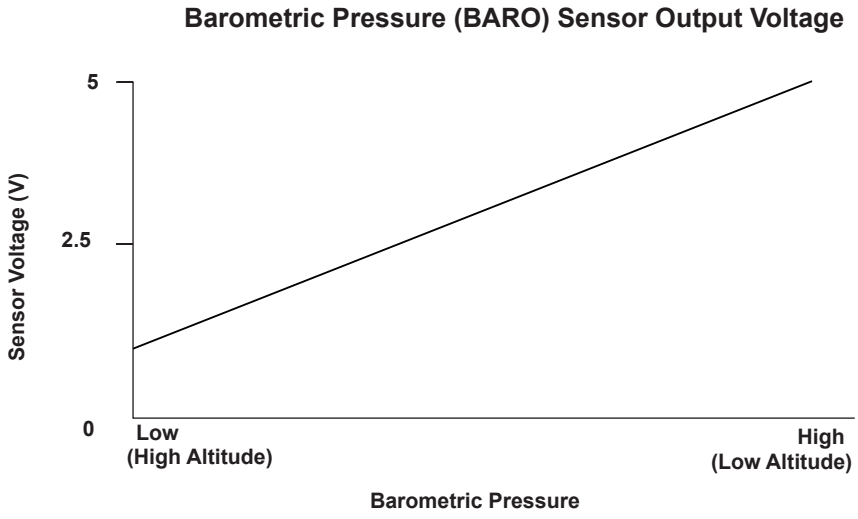
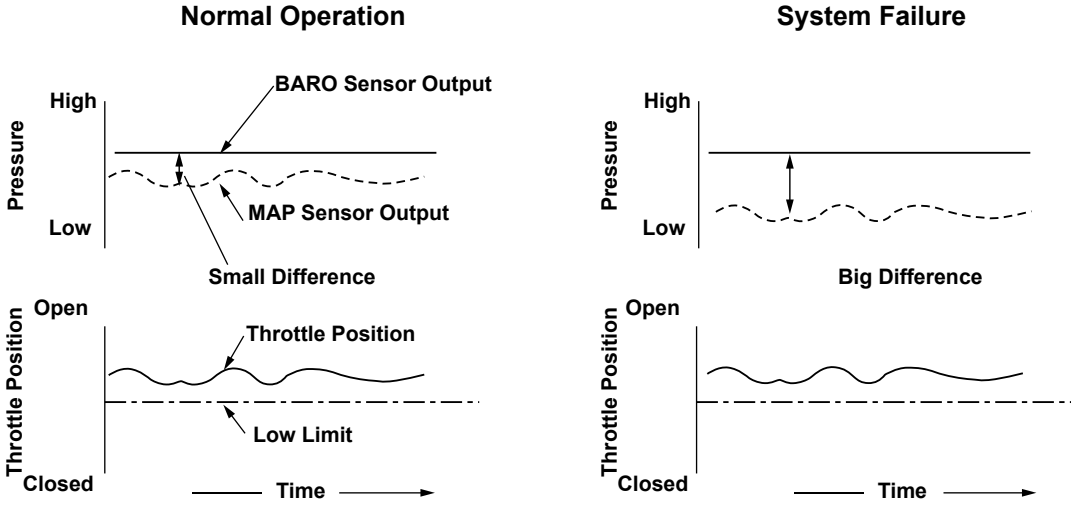
Advanced Diagnostics

DTC P1106: Barometric Pressure (BARO) Sensor Range/Performance Problem



P1106-9671



P1106-9771

General Description

The barometric pressure (BARO) sensor is built into the engine control module (ECM)/powertrain control module (PCM) and monitors atmospheric pressure. When the throttle valve is wide open, the manifold absolute pressure (MAP) sensor output is nearly equal to the BARO sensor output. Making use of this characteristic, a malfunction can be detected in the BARO sensor output.

If the throttle position is beyond a value previously stored in the ECM/PCM that is used to detect “wide-open throttle”, and if the difference between the MAP sensor output and the BARO sensor output is equal to or greater than a set value, a malfunction in the BARO sensor output is detected and a DTC is stored.

Monitor Execution, Sequence, Duration, DTC Type

Execution	Once per driving cycle
Sequence	None
Duration	3 seconds or more
DTC Type	One drive cycle, MIL ON

Enable Conditions

Condition		Minimum	Maximum
Throttle position	1,000 rpm	11.9º *1	—
		12.3º *2	
	3,000 rpm	26.3º *1	—
		29.5º *2	
No active DTCs		ECM/PCM, MAP, CKP, TP, BARO	

*1: F23A1, F23A4 engines
*2: F23A5 engine

Malfunction Threshold

The difference between the BARO sensor output and the MAP sensor output is 20 kPa (153 mmHg, 6.0 in.Hg) or less for at least 3 seconds.

Driving Pattern

1. Start the engine. Hold the engine at 3,000 rpm with no load (in park or neutral) until the radiator fan comes on.
2. Drive the vehicle with the throttle position predetermined for at least 3 seconds.

- If you have difficulty duplicating the DTC, retest after turning off electrical components such as the audio system and A/C, and try a different gear position.
- Drive the vehicle in this manner only if the traffic regulations and ambient conditions allow.

Diagnosis Details

Conditions for illuminating the MIL
When a malfunction is detected during the first drive cycle, a Temporary DTC is stored in the ECM/PCM memory. If the malfunction recurs during the next (second) drive cycle, the MIL comes on and the DTC and the freeze frame data are stored.

Conditions for clearing the MIL
The MIL will be cleared if the malfunction does not recur during three consecutive trips in which the diagnostic runs.
The MIL, the DTC, the Temporary DTC, and the freeze frame data can be cleared by using the scan tool Clear command or by disconnecting the battery.